

## From STIC Search Report

the magnitude of this activity is that at position 56 of **SpoOF** similar to P; this residue is adjacent to the site of phosphorylation, Asp 54. For example, **SpoOF** similar to P K56N has a 23-fold greater autophosphatase activity ( $t(1/2) = 8$  min) than wild-type **SpoOF** similar to P ( $t(1/2) = 180$  min). It is suggested that, by analogy to the GTPase activity of p21(**ras**) and by examining the crystallographic structure of **SpoOF**, that the carboxamide of the mutant Asn 56 may favorably position a catalytic water near the protein acyl phosphate to promote **SpoOF** similar to P K56N hydrolysis. It is also deduced that Lys 56 in the wild-type protein is critical for the efficient interaction and phosphoryl transfer between **SpoOF** and its cognate protein kinase, KinA. Comparison of the known response regulators shows that inefficient autophosphatases ( $t(1/2)$  on the order of hours) typically contain an amino acid residue with a long side chain at the position equivalent to 56 in **SpoOF**, whereas efficient autophosphatases ( $t(1/2)$  on the order of minutes) frequently contain a residue with a carboxamide or carboxylate side chain at this position. It appears that, by altering residues adjacent to the active site, the autophosphatase activity of response regulator proteins has been attenuated to match the diverse biological roles played by these proteins.

4/3,AB/3 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01660470 SUPPLIER NUMBER: 16270397  
Ready to rope a remote access deal? (remote LAN access products) (includes related articles about remote control and security; there is also a 'Short List' of products and a 'Remote LAN Access' product-comparison chart) (Buyers Guide)  
Miller, Mark  
Network World, v11, n46, p66(10)  
Nov 14, 1994  
DOCUMENT TYPE: Buyers Guide ISSN: 0887-7661 LANGUAGE: ENGLISH  
RECORD TYPE: ABSTRACT

ABSTRACT: Remote LAN access products, including dial-up bridge/routers, **remote access servers** and remote node software, allow users at distant sites to connect with a centralized LAN and function as if they were locally attached. Such products represent a technical advance compared with earlier arrangements, which employed terminal emulation or remote control software. Moreover, remote access products have been strengthened during 1994, adding capabilities such as LAN **spoofing**, as well as support for more transport protocols and client operating systems. Also, today's remote access products operate over a broader range of WAN connections. Perhaps the most significant development is widespread availability of ISDN, especially in large metropolitan areas. An industry observer says remote LAN access is a perfect application for ISDN.

4/3,AB/4 (Item 1 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
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1240578 Supplier Number: 01240578  
Products to Secure Remote Net Links  
(Cylink Corp and Raptor Systems Inc are introducing hardware and software to provide system security from an enterprise level)

communicationsWeek, n 566, p 1+

July 17, 1995

DOCUMENT TYPE: Journal ISSN: 0748-8121 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 834

ABSTRACT:

Cylink Corp (Sunnyvale, CA) and Raptor Systems Inc (Waltham, MA) are introducing hardware and software to provide system security from an enterprise level. Cylink will be offering a certificate-based remote-access security system that includes SecureGate, an access-security server that acts as a gateway into the corporate network. It also has SecureTraveler for Windows, a software package. Meanwhile, Raptor will be offering EagleNomad, a remote-access system that is linked with its SecureConnect technology. The software uses encryption to secure communications and prevent address spoofing. Overall, the number of remote-access servers in use rose from 36,000 in 1993 to 67,000 in 1994, according to International Data Corp.

4/3,AB/5 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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01403828 00054815

Multiple routes to ISDN

Harbaugh, Logan

Informationweek Remote Access Technology Supplement PP: 12-22 Feb 24, 1997 ISSN: 8750-6874 JRNL CODE: IWK

WORD COUNT: 1325

ABSTRACT: The growth in customer interest in ISDN routers is reflected in the number of ISDN router offerings from vendors. A buyer's guide is presented that covers more than 40 vendors and nearly 150 products. Some routers connect to a LAN and route traffic over an ISDN connection to an ISDN router connected to another LAN. Many routers have expansion modules for connecting to both LANs and WANs. There are also software products, such as Novell's Multiprotocol Router and NetWare Connect, Microsoft's Windows NT Remote Access Server, and Eicon Technology's WAN services for Windows NT. The routers included in the buyer's guide have one or more ISDN ports and one or more LAN ports, and may have Plain Old Telephone Service ports and additional WAN ports. The LAN ports are usually Ethernet, but some vendors also support token-ring and other protocols, especially in the larger, modular devices. Features to consider when choosing an ISDN router include: 1. dial-on-demand, 2. bandwidth on demand, 3. compression, and 4. spoofing.

4/3,AB/6 (Item 2 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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01237138 98-86533

Want fast Internet access? Go ISDN

Darling, Charles B

Datamation v42n11 PP: 78-85 Jun 1, 1996 ISSN: 0011-6963 JRNL CODE: DAT

ABSTRACT: Major drivers of ISDN are dial-up and Internet access. Users should have one B channel for each telecommuter and will want to consider

primary Rate Interfaces (PRI) rather than Basic Rate Interface (BRI) devices. With PRI, users will plug in and manage a single T1, rather than a dozen twisted pairs for BRI. A routing feature to look for, whether for budgetary reasons or to back up the **spoofing** logic, is the ability to limit connection time. An alternative approach to a simple ISDN access arrangement would be to find a **remote-access server** that can handle both dial-in users and a fat pipe to the Internet. When evaluating **remote-access servers**, issues to consider include total throughput and compression. Users should look for some serious flexibility in a server's bandwidth-on-demand features. Perhaps the most important management feature users should examine is a certain level of self-disclosure. A table summarizing features of representative central-site ISDN **remote access servers** is presented.

4/3,AB/7 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
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23132285

Now he's making toupee in Italy

NO-SUB-HEADLINE

SUNDAY MAIL

June 02, 2002

JOURNAL CODE: FSMA LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 46

NO, it's not an advert for a miracle hair restorer. Sir Sean has sprouted thick silver hair for an ad campaign in Italy. He plays it for laughs in a pounds 14million series for insurance firm RAS. The spoof ads show him being ignored by Italians.

4/3,AB/8 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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08979526 SUPPLIER NUMBER: 18700499 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
3Com, others prep remote access gear. (3Com enhances AccessBuilder) (Product Announcement)

Rogers, Amy

CommunicationsWeek, n628, p1(2)

Sep 16, 1996

DOCUMENT TYPE: Product Announcement ISSN: 0746-8121 LANGUAGE:

English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 650 LINE COUNT: 00054

ABSTRACT: 3Com is among several companies planning to announce remote-access products or enhancements at the NetWorld+Interop trade show, to be held in the week of Sep 16, 1996, in Atlanta, GA. 3Com will introduce a client called 3Access, which works with the company's AccessBuilder **remote access servers**. 3Access, which incorporates a TCP/IP stack from FTP Software, provides IP **spoofing**, for saving on costs of dial-up LAN sessions; NetWare executables; and scripting that enables single-step authentications. 3Access, which costs \$495 for an unlimited user license, supports Windows 3.x and will add support for Windows 95 later in 1996. 3Com also is strengthening its server software for AccessBuilder, adding support for TACACS+ security, as well as dial-out via IP, IPX and Serial Line Internet Protocol (SLIP).

4/3,AB/9 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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08667859 SUPPLIER NUMBER: 18245457 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
3Com readies high-end access server. (AccessBuilder 5000 communications  
server, AccessBuilder Remote User 400 access router) (Product  
Announcement)

Rogers, Amy  
CommunicationsWeek, n608, p5(1)  
April 29, 1996

DOCUMENT TYPE: Product Announcement ISSN: 0746-8121 LANGUAGE:  
English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 382 LINE COUNT: 00033

ABSTRACT: 3Com Corp announces its Access Builder 5000 chassis-based  
communications server which consolidates remote access hardware by way of  
user slot modules that can handle ISDN, asynchronous or other types of  
network links. The product is meant to compete with U.S. Robotics Inc's  
Total Control and Cisco Systems Inc's AS2500 **remote-access**  
**servers**. One user questions, however, if the product will be useful  
to network administrators who prefer more decentralized methods. 3Com also  
announces the \$995 AccessBuilder Remote User 400 access router for remote  
offices. This unit lets remote users access the Internet or the corporate  
LAN through Novell's Internetwork Packet Exchange/Sequenced Packet Exchange  
protocol or the TCP/IP protocol. It also features IPX **spoofing** and  
4-to-1 Stac compression.

4/3,AB/10 (Item 3 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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07760760 SUPPLIER NUMBER: 16735226 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Network security products to be unveiled. (Checkpoint Software Ltd, Raptor  
Systems Inc, Security Dynamics Inc to offer firewall products) (Networld  
+ Interop) (Product Announcement)

Rodriguez, Karen  
InfoWorld, v17, n13, p57(1)  
March 27, 1995

DOCUMENT TYPE: Product Announcement ISSN: 0199-6649 LANGUAGE:  
ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 400 LINE COUNT: 00033

ABSTRACT: Checkpoint Software Ltd, Raptor Systems Inc and Security Dynamics Inc  
will announce enhancements to their 'firewall' security  
software products designed to protect networks from unauthorized access.  
Checkpoint will introduce a new version of its Firewall I program that  
incorporates user authentication via passwords and hardware keys. The  
program also includes a new agent that prevents the IP **spoofing**  
technique and offers easier configuration. The product, now shipping, costs  
\$5,000 to \$19,000. Raptor is extending its Eagle product line with Eagle  
Remote, a version of the security tool that lets administrators set up  
offices with the same robust security available in the current Eagle  
Enterprise. Eagle Remote is rules-based and offers security to multiple  
sites with rule sets maintained at corporate headquarters. Raptor is also  
upgrading Eagle Enterprise with new Virtual Private Networking (VPN)  
support. Eagle Enterprise 2.3 is priced at \$25,000 for central sites and  
\$2,500 for remote sites; Eagle Remote 1.0 will sell for \$17,000. Security

Dynamics has a new agreement with Microsoft Corp to incorporate support for its SecurID hardware key into Windows NT Remote Access Server.

Users will have changing networking and Internet requirements and may wish to take advantage of new technologies, the Internet Gateway has been designed to be scalable, flexible and future proof. The network connection to the Internet can utilize any connection method and provides total freedom of choice. Connection methods include: modem, Cable Modem, ADSL, SDSL, ISDN and leased line T1. The Internet Gateway can be used to add access control and filtering to existing router systems. "Schools are under increasing pressure to provide Internet access for students while at the same time they are under parental and legislative pressure to provide a safe environment" said Brian Morris, President of Vicomsoft. "The Vicomsoft Internet Gateway uniquely satisfies both requirements as well as being inexpensive and usable by non-technical staff. Schools can use our solution to comply with pending access-filtering legislation." In addition to professional router capabilities, the Vicomsoft Internet Gateway incorporates optional advanced features such as: (a) Shared Internet Access using Network Address Translation (NAT) technology allowing all users of the network to simultaneously share a single Internet account and connection. (b) Secure Firewall functionality that provides security against attacks from the Internet. (c) An integrated DHCP Server that provides central administration and automatic allocation of TCP/IP client network configurations. (d) Remote Access Server functionality that enables an administrator to set up authorized remote dial-in users. Pricing and Availability Vicomsoft Internet Gateway is available and shipping now. Pricing starts from \$215.00. Full pricing and detailed product information can be found on Vicomsoft's web site at <http://www.vicomsoft.com> Vicomsoft encourages users to 'try before buying' and provides a downloadable evaluation version of the Internet Gateway on its web site. About Vicomsoft Founded in 1982, Vicomsoft was one of the first software companies to provide desktop personal computer communications solutions. Vicomsoft has over 16 years experience in providing and supporting professional quality products for a wide range of customers including enterprise, schools, higher education, small business, SOHO and home users. An ongoing research and development commitment ensures our customers continue to receive leading edge solutions. For more information contact Vicomsoft by phone at 800-818 4266 or 650-691 9520 or on the Internet at <http://www.vicomsoft.com> NOTE: All trademarks acknowledged. /CONTACT: Bryan Keet of Vicomsoft, 650-691-9520, or [bryan.keet@vicomsoft.com](mailto:bryan.keet@vicomsoft.com)/ 05:00 EDT

13/3,AB/3 (Item 2 from file: 20)  
 DIALOG(R)File 20:Dialog Global Reporter  
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03004396  
 Mapletree Networks Announces Open Systems Remote Networking Solution  
 BUSINESS WIRE  
 October 05, 1998  
 JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
 WORD COUNT: 657

WESTWOOD, Mass.--(BUSINESS WIRE)--Oct. 5, 1998-- Mapletree Networks(tm) 3000 Series Solution offers next generation remote networking for Windows NT Mapletree Networks Inc., a start-up technology company specializing in high-density universal access communications products for the global internetworking marketplace, today introduced the Mapletree Networks 3000 Series Product. The 3000 Series Product is a remote networking solution for servers running Windows NT. The 3000 Series provides Remote Networking connectivity for simultaneous users, with ITU-T V.90 / 56K modems or any industry-standard ISDN (Integrated Services

digital Network) Router. The Mapletree Networks 3000 product will be exhibited at NetWorld+Interop in Atlanta, Oct 21 - 23/Booth Number 3323. Open Systems Solution The 3000 solution for NT servers consists of modem cards containing multiple V.90 / 56K digital modems and an Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI) or Basic Rate Interface (BRI) card. This solution provides central LAN access over dial-up networks, for users who work at home, users who work in remote offices, or users who are constantly on the move. The Mapletree Networks 3000 Series provides a convenient, efficient, and cost-effective alternative to traditional access concentrators by combining remote access technology into an Open Systems LAN Server-based platform. This provides total synchronization of remote access communications and existing LAN infrastructure. Sean Aruda, Vice President of Sales and Marketing, said, "Open systems remote access servers optimize standards-based hardware, software, and interfaces to provide better performing, higher-value servers that are flexible and scalable to support evolving technologies and requirements. This product is the solution that the enterprise has been waiting for." Leveraging NT The Mapletree Networks 3000 Solution is designed for Windows NT Server and Microsoft's Routing and Remote access service (RRAS). RRAS is designed specifically to provide remote modem or ISDN router access to central LAN applications, all under the simple control of Windows NT. Users familiar with NT no longer have to learn to use new proprietary remote networking systems or 'black boxes' that connect to their network for remote access. Other advantages include user configuration & security features that integrated into existing user NT domains. Intuitive Installation Wizard The Mapletree Networks 3000 Series installation wizard leverages the capabilities and advantages offered by Windows NT GUI interface. Installing the Mapletree Networks 3000 and associated management tools is simple and straightforward, allowing remote access solutions to be up and running in less than one hour. In comparison to some of the complexities of configuring traditional access concentrators, an Open Systems solution brings the 'Plug & Play' concept to remote networking, without compromising performance or security. Full Network Management The 3000 Series was designed as a complete remote networking solution, complete with RRAS management tools, Internet access, remote configuration support, and disaster-recovery tools. The product is easily installed and configured through Mapletree's installation wizard. With an Open Systems solution, other available options include Internet filtering, firewalls, fax server, RADIUS support, and billing. With these features, enterprise customers have the flexibility of choosing additional application software to meet their specific requirements. The 3000 Solution has a scalable architecture, and can be expanded and adapted to meet individual requirements and address a variety of applications. There are several models available, each offering a different combination of digital modems and PRI or BRI ISDN ports. The Mapletree Networks Model #3024, (with 24 ISDN/V.90/56K Ports) is available in October 1998 and lists for \$7695 U.S. About Mapletree Networks Mapletree Networks (www.mapletreenetworks.com) provides leading edge internetworking and remote networking core technology for the high growth remote access and NT remote access server market. This includes access solutions for telco's, carriers, ISP's, and large enterprise customers. Former executives of Microcom, Inc. founded the company in November of 1997. The company is headquartered in Westwood, Massachusetts and has a European office based in the UK. For more information about Mapletree Networks contact: Mapletree Networks Inc. 30 Perwal Street, Westwood, MA 02094, Tel: 781-461 4405 CONTACT: Mapletree Networks Eva Daly, 781/461-4376, edaly@mapletreenetworks.com. 06:34 EDT OCTOBER 5, 1998

17/3,AB/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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03768061 Supplier Number: 45355707  
Micom Router Integrates Voice and Data  
MIDRANGE Systems, pl2  
Feb 24, 1995  
Language: English Record Type: Abstract  
Document Type: Magazine/Journal; Trade

ABSTRACT:

Micom Communications have recently introduced NetRunner Integration Router. The software reduces the cost of per-minute charges from PSTN's. It does this by integrating legacy data, voice and fax communications and Ethernet, LAN traffic over a single leased line. Asynchronous and synchronous legacy data are supported by 2 - 5 data ports. Up to 41 legacy ports can be configured for each office. The self-learning of network addresses reduces the effort and setup cost of routers and eliminates WAN broadcast width. Broadcast traffic is kept off LAN and WAN links by the use of ARP and SAP/RIP spoofing.

17/3,AB/2 (Item 1 from file: 18)  
DIALOG(R)File 18:Gale Group F&S Index(R)  
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02446046 Supplier Number: 45355707  
Micom Router Integrates Voice and Data  
MIDRANGE Systems, pl2  
Feb 24, 1995  
ISSN: 1041-8237  
Language: English Record Type: Abstract  
Document Type: Magazine/Journal; Trade

ABSTRACT:

Micom Communications have recently introduced NetRunner Integration Router. The software reduces the cost of per-minute charges from PSTN's. It does this by integrating legacy data, voice and fax communications and Ethernet, LAN traffic over a single leased line. Asynchronous and synchronous legacy data are supported by 2 - 5 data ports. Up to 41 legacy ports can be configured for each office. The self-learning of network addresses reduces the effort and setup cost of routers and eliminates WAN broadcast width. Broadcast traffic is kept off LAN and WAN links by the use of ARP and SAP/RIP spoofing.

17/3,AB/3 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
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02802670  
VDS Launches iService RealFAX and iService RealMESSAGE; A Suite of Real-Time Internet Fax Services for Resale by Telcos, CLECs, ISP's, Agents, Resellers and Service Providers  
BUSINESS WIRE  
September 14, 1998  
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 806



1/3,AB/1 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
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01753222

SURF Communication Solutions Ltd., Developer of State-of-the-Art Software  
Modems, to Participate in Tech Ventures

PR NEWSWIRE

May 27, 1998 17:47

JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 430

SANTA CLARA,, Calif., May 27 /PRNewswire/ -- SURF Communication Solutions Ltd., specializing in the design and development of cost-effective and high-quality software modem solutions, will be participating in Tech Ventures in Santa Clara, California on May 27 - May 28. The company's products are software implementations of a wide range of modem and fax protocols. The software code is of modular and robust design, which enables easy porting and implementation on customers' platforms and processors. SURF designs customized hardware platforms for its software products.

The company recently announced the release of the V.90 Software Modem, fully compatible to the new ITU V.90 56 Kbps KBPS standard modem. The company's products are ideal for integration into customer premise electronics (such as TV games, Internet appliances and hand-held PCs). They are also specially suited for server applications that require high-density modem pools (such as Remote Access Servers -- RAS and PSTN switches) or lower density modem banks (for the SOHO applications).

3,AB/1 (Item 1 from file: 148)  
ALOG(R) File 148:Gale Group Trade & Industry DB  
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08667859 SUPPLIER NUMBER: 18245457 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
3Com readies high-end access **server**. (AccessBuilder 5000  
**communications server**, AccessBuilder Remote User 400 access  
router)(Product Announcement)

Rogers, Amy

CommunicationsWeek, n608, p5(1)

April 29, 1996

DOCUMENT TYPE: Product Announcement ISSN: 0746-8121 LANGUAGE:

English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 382 LINE COUNT: 00033

ABSTRACT: 3Com Corp announces its Access Builder 5000 chassis-based **communications server** which consolidates remote access hardware by way of user slot modules that can handle ISDN, asynchronous or other types of network links. The product is meant to compete with U.S. Robotics Inc's Total Control and Cisco Systems Inc's AS2500 **remote-access servers**. One user questions, however, if the product will be useful to network administrators who prefer more decentralized methods. 3Com also announces the \$995 AccessBuilder Remote User 400 access router for remote offices. This unit lets remote users access the Internet or the corporate LAN through Novell's Internetwork Packet Exchange/Sequenced Packet Exchange protocol or the TCP/IP protocol. It also features IPX **spoofing** and 4-to-1 Stac compression.

systems. Reports that IP telephony systems can be subjected to the following kinds of attacks: Denial of Service, Ping of Death, port scanning, packet sniffing, IP spoofing, viruses, worms, Trojan horses, and time-triggered bombs. Discusses the procedures for securing application and IP telephony communications servers, Voice-over-IP (VoIP) clients, VoIP in the wiring closet and across the campus, branches for IP telephony, and remote access for IP telephony. Concludes that IP telephony can be made secure, through operating system hardening, by securing network management, and by taking advantages of the technologies put in place for data security, notably switched Ethernet and IP virtual private networks (VPNs). (MEM)

December 1, 2002

29/3,AB/5 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01654940 SUPPLIER NUMBER: 16285428  
Companies offer remote access options. (TechSmith Corp's Enterprise Wide communications server; Xylogics' Annex 9.0 network software)  
(Product Announcement)

Csenger, Michael

Network World, v11, n40, p25(1)

Oct 3, 1994

DOCUMENT TYPE: Product Announcement  
ENGLISH RECORD TYPE: ABSTRACT

ISSN: 0887-7661

LANGUAGE:

ABSTRACT: TechSmith Corp introduces its \$2,495 Enterprise Wide remote-access platform, for use in client/server environments. The product incorporates features that optimize throughput by spoofing certain polling protocols and by providing an API that allows users to integrate applications tightly with remote-access software products. Enterprise Wide is available now for four users. The system can support as many as 16 asynchronous dial-up connections. Separately, Xylogics Inc announces Release 9.0 of its Annex remote-access product line. Annex 9.0 is available as a software upgrade starting at \$495. Pricing for Annex products ranges from \$2,290 to \$14,185.

29/3,AB/6 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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01200438 98-49833

Remote Sites: In From the Cold

Taylor, Kieran

Data Communications v25n5 PP: 40-42 Apr 1996 ISSN: 0363-6399

JRNL CODE: DCM

ABSTRACT: Connecting remote sites to the enterprise is an absolute necessity. That means net managers devising a remote access strategy cannot afford to leave anyone off-net - regardless of how small the office is or what protocol it is running. Shiva Corp. is taking the all-inclusive approach to networking with its LANrover Access Switch - a scalable central-site communications server that fields calls from multiprotocol clients over analog and ISDN connections. The switch can talk to PCs running major operating systems, and it does not mandate proprietary client software on users' workstations. However, net managers who opt for the vendor's client can maximize WAN bandwidth via multilink point-to-point

AB/9 (Item 1 from file: 148)  
G(R)File 148:Gale Group Trade & Industry DB  
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343426 SUPPLIER NUMBER: 17906406  
ockwell. (Nethopper NH-BRI 600 **communications server**) (The  
CRN/Comdex Test Center) (Hardware Review)(Evaluation)  
Thomas, Skaria

Computer Reseller News, n663, p151(2)

Dec 18, 1995

DOCUMENT TYPE: Evaluation

ISSN: 0893-8377

LANGUAGE: English

RECORD TYPE: Abstract

ABSTRACT: Rockwell Network Systems' NetHopper NH-BRI 600 line of **communications servers** reduce consumers' monthly ISDN charges by eliminating superfluous dialing. The NetHopper includes IPX and IP routing, an integrated modem for automatic backup in case of system failure and a U-interface that provides plug-and-play capability with its internal NT1 component. The NetHopper provides legacy analog support through additional V.34 modems, offering a clear path of migration to ISDN capability as well as remote access for non-ISDN clients. NetHopper's BRI includes filtering and **spoofing** features to reduce unnecessary expenses associated with the chatty IPX protocol, and NetHopper updates its RIP and SAP information to help branch users find an open server.

29/3,AB/10 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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07367989 SUPPLIER NUMBER: 16285428  
Companies offer remote access options. (TechSmith Corp's Enterprise Wide  
**communications server**; Xylogics' Annex 9.0 network software)  
(Product Announcement)

Csenger, Michael

Network World, v11, n40, p25(1)

Oct 3, 1994

DOCUMENT TYPE: Product Announcement

ISSN: 0887-7661

LANGUAGE:

ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: TechSmith Corp introduces its \$2,495 Enterprise Wide remote-access platform, for use in client/server environments. The product incorporates features that optimize throughput by **spoofing** certain polling protocols and by providing an API that allows users to integrate applications tightly with remote-access software products. Enterprise Wide is available now for four users. The system can support as many as 16 asynchronous dial-up connections. Separately, Xylogics Inc announces Release 9.0 of its Annex remote-access product line. Annex 9.0 is available as a software upgrade starting at \$495. Pricing for Annex products ranges from \$2,290 to \$14,185.

29/3,AB/11 (Item 1 from file: 256)

Branch-Office ISDN: Five difficult pieces

ones, Bob

Data Communications v25n2 PP: 131-138 Feb 1996 ISSN: 0363-6399

JRNL CODE: DCM

ABSTRACT: Thanks to increasingly widespread availability of ISDN, remote office LANs have started branching out. Inexpensive new ISDN communications servers are permitting remote LAN administrators to build their own LAN-to-LAN internetworks. These servers offer one solution; ISDN routers are another option. This new trend to decentralized internetworking should promote more dynamic and efficient communications among remote branch offices. However, it also poses new challenges for enterprise network management teams that will have to support the branch office LAN administrators who implement this kind of remote internetwork, because they typically have little knowledge of such elements as ISDN line configuration. These support challenges can be divided among 5 basic categories: 1. remote access server configuration, 2. security management, 3. link utilization, 4. bandwidth allocation, and 5. remote monitoring and management.

32/3,AB/4 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter

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03106097

NEC Express5800 Remote Access Server Solution  
Revolutionizes Industry by Offering Open Standard Windows NT-based  
Alternative

BUSINESS WIRE

October 14, 1998

JOURNAL CODE: WBWE

LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1150

MOUNTAIN VIEW, Calif.--(BUSINESS WIRE)--Oct. 14, 1998-- New Remote Access Server Solution Extends Benefits of Open PC Architecture to Users NEC Computer Systems Division (NEC CSD) today introduced the Express5800(tm) Remote Access Server (RAS). This new solution is a fully integrated communication server that links remote clients, telecommuters and branch offices to the corporate network using analog or digital connectivity over the public telephone network or through virtual private networks. The Express5800 RAS server solution uses an open system approach based on industry-standard Intel microprocessors, Microsoft(tm) Windows(tm) NT Server software and third party communication applications. The result is a closed, proprietary systems and extends the familiarity of the Windows NT environment to the remote communications application market. In addition, with NEC CSD's RAS server solution, MIS professionals may leverage current open-standards infrastructure investments. The RAS server solution is also easy to upgrade and offers a migration path to new technologies. "We believe we have created one of the highest performing and one of the most technologically advanced Windows NT-based Remote Access Server solutions in the market today," said Luis Pacheco, vice president of product development at NEC CSD. "We will continue to work closely with companies such as Microsoft, RAScom and Traveling Software to introduce new levels of performance and value for this rapidly expanding remote communication market." "Organizations need cost-effective, high-performance remote access solutions to enable remote workers, mobile professionals and telecommuters to be productive," said

Win Kean, group product manager for Windows NT Server communications at Microsoft Corp. "Windows NT Server is designed to meet these needs in the most open, easy-to-use and flexible way. We're pleased that NEC CSD has chosen Windows NT as the platform for its Express5800 systems." "RAScom is a pioneer in Remote Access Servers based on Windows NT, and we're proud to be in an alliance with NEC Computer Systems Division," said Mark Galvin, president and CEO of RAScom. "We believe that NEC CSD has created a fully integrated Remote Access Server solution that will help propel the remote access market into the era of open architecture." "By integrating Traveling Software's LapLink Enterprise Network Accelerator with their Windows NT-based communication platform, NEC CSD is demonstrating the advantages of an open approach to communication," said Mark Eppley, chairman, president and CEO of Traveling Software. "LapLink Enterprise Network Accelerator is designed to help accelerate file download times by 300-400 percent and reduce connection costs. The result is value and a low cost of ownership for the NEC CSD solution." Integrated Application Software Provides Total Remote Access Solution NEC CSD has integrated several third party applications with its open Remote Access Server to provide a total communication environment from which to host and manage remote communications. These applications include: -- RAScom's wide area network and modem adapter cards with RASware software, which provides the glue between the communication hardware and the operating system -- Traveling Software's LapLink Enterprise Network Accelerator software that accelerates file downloads up to 400 percent -- Virtual Motion Remote Access Manager software, which provides system resource management, access control and usage accounting -- Funk Software Proxy Remote Control software to allow Information Technology managers or support professionals to view and operate NEC CSD's server, enabling remote management and support -- ImagineLAN ConfigSafe software to enable network administrators to track and manage the Remote Access Server configuration -- NEC ESMPRO Server Management Suite software to configure, monitor and control the Express5800 Remote Access Server NEC CSD Remote Access Server Configurations NEC CSD offers both Basic Rate ISDN and Primary Rate ISDN configurations of its Express5800 Remote Access Server. All NEC Express5800 Remote Access Servers include NEC ESMPRO Server Management Software suite, Traveling Software's LapLink Enterprise Network Accelerator software with unlimited rights to copy the client software for use with an NEC Express5800 server, Funk Software Proxy Remote Control software, ImagineLAN ConfigSafe software and three year on-site limited warranty(1). The Express5800 Basic Rate ISDN (BRI) Servers The Express5800 BRI models are designed for environments that require remote connections for up to 16 digital or analog calls concurrently. Communication with remote connections is established with a Basic Rate ISDN circuit that supports ISDN calls or up to 56(2) kilobits per second modem access. In a typical corporate environment, these systems can support 80 or more remote clients. Prices for Express5800 BRI models start at \$11,996(3) and includes a choice of 266 or 333MHz Intel Pentium II processor with 512K L2 cache, octal BRI-WAN Interface with 16 integrated digital modems and a 10/100 Ethernet controller. The Express5800 Primary Rate ISDN (PRI) Servers The Express5800 PRI models are designed for environments requiring remote connections handling up to 48 digital or analog calls concurrently. Communication with the remote connections is established with up to two T1, fractional T1 or Primary Rate ISDN lines supporting ISDN calls or up to 56(2) kilobits per second modem access. In a typical corporate environment, these systems can support 240 or more remote clients. Prices for Express5800 PRI models start at \$15,996 and include a choice of 266 or 333MHz Intel Pentium II processor with 512K L2 cache, dual T1/PRI adapter, 24-channel digital modem adapter expandable to 48 and

10/100 Ethernet controller. Availability The Express5800 RAS solution is available now and can be ordered directly from NEC CSD at 1-888-NEC NOW or [www.necnow.com](http://www.necnow.com), or through selected resellers. About NEC Computer Systems Division NEC Computer Systems Division is a leading manufacturer of computer products and solutions for the commercial market. NEC-branded products include Versa(R) notebook computers, Direction(tm) personal computers, PowerMate(R) desktop computers, Express5800(tm) servers and MobilePro(tm) handheld personal computers. NEC Computer Systems Division uses a distribution model that enables customers to purchase BTO and CTO notebooks, servers and desktop products, direct or via a network of qualified resellers. By calling 1-888-8NEC-NOW or visiting the web site at [www.necnow.com](http://www.necnow.com), customers decide how, where and when they want their orders fulfilled. NEC Computer Systems Division is a division of Sacramento, California-based Packard Bell NEC, Inc., the fifth largest PC vendor in the United States according to International Data Corporation, an independent industry research firm based in Framingham, Mass. (a) NEC, PowerMate and Versa are registered trademarks and ESMPRO is a trademark of NEC Corporation used under license Direction and MobilePro are trademarks, and NEC Now is a service mark of Packard Bell NEC, Inc. Microsoft and Windows are trademarks of Microsoft Corporation. All other trademarks or registered trademarks are the property of their respective trademark owners. (1) Call 1-888-NEC-NOW for complete terms. (2) Maximum download speeds are limited to 53 Kbps. Actual speeds may vary. Uploads travel at speeds up to 28.8 Kbps. Requires compatible analog phone line. (3) Prices and specifications subject to change without notice. Resellers determine their own pricing. (a) (Q2, 1998 quoted with permission from IDC) CONTACT: NEC Computer Systems Division D.J. Anderson, 650/528-5306 [d.anderson@neccsd.com](mailto:d.anderson@neccsd.com) or Megan Carter, 650/528-5515 [m.carter@neccsd.com](mailto:m.carter@neccsd.com) 08:59 EDT OCTOBER 14, 1998

32/3,AB/5 (Item 1 from file: 256)  
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00085566 DOCUMENT TYPE: Review

PRODUCT NAMES: Microsoft Windows NT Server 3.51 with RAS (442674);  
NetWare Connect 2.0 (461075); LAN Distance 1.11 (478121); Remote Office  
2.0 (484733); WanderLink 2.0 (513199)

TITLE: It's in the Software  
AUTHOR: Cooke, Kevin D Boardman, Bruce  
SOURCE: Network Computing, v6 n14 p64(8) Nov 1, 1995  
ISSN: 1046-4468  
HOMEPAGE: <http://www.NetworkComputing.com>

RECORD TYPE: Review  
REVIEW TYPE: Review  
GRADE: A

Remote node software lets remote users access a corporate LAN over the phone. Microsoft's Windows NT Server 3.51 with RAS (Remote Access Service) now has TCP/IP and IPX/SPX support and is easy to configure and manage. NT RAS is scalable and can run as a nondedicated server. Novell's NetWare Connect 2.0 offers tight integration with NetWare and installs as a set of NLMS. A maintenance release due soon will include performance tuning, DHCP support, and server-side compression. IBM's LAN Distance 1.11 includes a very fast IP stack and both a Windows 3.1 and OS/2 client. The setup and interface is overly complex, however. Stampede Technologies' Remote Office 2.0 communications server is a

35/3,AB/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01846495 SUPPLIER NUMBER: 17572123. (USE FORMAT 7 OR 9 FOR FULL TEXT)  
ISDN remote wares multiply: wide variety of adapters, servers offered by  
vendors. (3Com and Shiva offer products supporting ISDN) (Product  
Announcement)  
Lavilla, Stacy  
PC Week, v12, n40, p51(2)  
Oct 9, 1995  
DOCUMENT TYPE: Product Announcement ISSN: 0740-1604 LANGUAGE:  
English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 627 LINE COUNT: 00051

ABSTRACT: 3Com and Shiva introduce remote access products that support the ISDN  
communications protocol. 3Com's \$14,500 Aperature II includes ISDN  
bridge/routing, ISDN terminal adapter and analog modem  
functionality in one device. The product boasts 240 ports and 10 PRI  
interfaces and supports TCP/IP connections to LANs, WANs and the Internet.  
The \$3,495 AccessBuilder 4000 ISDN **remote access server**  
processes remote connections over ISDN BRI and analog phone lines. The  
chassis-based product accommodates a maximum of two communications modules.  
3Com will also introduce the Arpeggio line of remote access products as  
well as the \$545 Impact ISDN ISA adapter. Shiva unveils the \$11,999  
ShivaIntegrator 500 concentrator, \$1,299 ShivaIntegrator 100 ISDN access  
server and the \$2,299 ShivaPort multiprotocol **communications**  
**server**. Each of Shiva's products also support ISDN technology.

35/3,AB/2 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
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01109586 CMP ACCESSION NUMBER: NWC19961101S0039  
Microcom ISPorte (Remote Access)  
Pamela Fruth (pfruth@nwc.com)  
NETWORK COMPUTING, 1996, n 717, PG130  
PUBLICATION DATE: 961101  
JOURNAL CODE: NWC LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Product Update  
WORD COUNT: 155  
TEXT:

New. It may not accommodate trade ships, but the ISPorte from  
Microcom will provide remote access for corporate environments and  
Internet service providers (ISPs). This digital modem rack lets you  
select the most suitable **communications server, remote**  
**access server**, terminal server or PC to access e-mail  
applications, databases, corporate information or the Internet. A  
compact, single rack shelf, it can hold up to 64 **analog modems**  
. Modem cards can be hot-swapped to convert individual analog lines  
to T1, E1 or ISDN Primary Rate Interface (PRI) links. ISPorte comes with  
porteWATCH, a monitoring system with an easy-to-use GUI that controls and  
configures modems individually or by group, while reporting the operating  
status of all modems. Password connection security lets each modem store  
up to 50 encrypted passwords.

35/3,AB/3 (Item 1 from file: 9)



ALOG(R)File 9:Business & Industry(R)  
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2498822 Supplier Number: 02498822

DIGI INT'L ROLLS OUT SERVER-BASED REMOTE ACCESS TO ASIA PAC  
(Digi International to launch server-based remote access products in  
selected Asia-Pacific countries in early-July 1999; to launch products in  
entire Asia-Pacific region by September 1999)

Asia Pulse, p n/a

June 23, 1999

DOCUMENT TYPE: Custom Wire (Southern & Eastern Asia)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 634

ABSTRACT:

Digi International Inc, provider of server-based communications solutions, will launch its DataFire **RAS 4**, DataFire **RAS 30/60** and AccelePort **RAS 8** concentrators and adapters in selected Asia-Pacific countries in early-July 1999. The products will launched in the entire region by September 1999. The products support the standards of V.90 and K56flex and operate on a range of systems, including Novell NetWare, Windows NT and SCO Unix. The firm commenced product testing and certification for the Asia-Pacific in spring 1999. Testing certification for Japan and Australia will be ready for summer 1999. Digi aims to finalise its testing and certification for the products for the rest of Asia by end-September 1999. The Acceleport **RAS 8** enables connections for as many as 8 POTS connections between analog modems on one PCI card. The PCI card, DataFire **RAS 4**, provides ISDN B Channel and 56Kbps modem connectivity on 4 BRI ports and is used for applications such as integrated messaging and fax. It is well-suited for small- to medium-sized business applications. The range of DataFire **RAS** products, which encompass the 60-port PCI card and the DataFire **RAS** family, offer high-density modems and ISDN B channel connections via PRI, BRI, T1 and E1 lines. The 60-port PCI card has the highest density of all server-based remote access concentrators available on the market. All of the products utilise the latest technology in digital signal processing, effectively offloading the WAN output and input's front end processing to the board for optimum server performance. The concentrators and adapters enable the convergence of data and voice applications onto the server with flexibility and ease-of-use, according to John Gaylord, Digi International's product management and corporate strategy director.

35/3/AB/4 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter  
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05173601

Digi International Extends Communication Adapter Family; 56K and ISDN  
Products Ready for Shipment

PR NEWSWIRE

May 03, 1999

JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 663

MINNEAPOLIS, May 3 /PRNewswire/ --Digi International Inc. (Nasdaq: DGII), the leader in server-based communications solutions, today announced the availability of two communications adapters that provide 56Kbps and ISDN server-based remote access. The AccelePort **RAS 8** (US list \$2,495) and the DataFire **RAS 4** (US list \$2,995)

re immediately available for shipment through thousands of value-added resellers and distributors in North America.

The DataFire RAS 4 is a PCI card providing both ISDN B Channel and 56Kbps modem connectivity on four BRI ports. The AccelePort RAS 8 provides connections for up to eight POTS connections to and from analog modems on a single PCI card. Both products support V.90 and K56flex standards and run on a variety of operating systems, including Windows NT, Novell NetWare and SCO Unix. The cards also can be utilized for other applications such as fax and integrated messaging and are ideal for small- to mid-sized business applications.

35/3,AB/5 (Item 2 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
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02959773

MediaGate Announces Equity Investment of \$8.9 Million

PR NEWSWIRE

September 29, 1998

JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 667

Capital to Fund MediaGate's Continuing Innovation of Digital Signal Processing And Universal Messaging to Create Unique Value-Add Solutions For Today's Service Providers SAN JOSE, Calif., Sept. 29 /PRNewswire/ -- MediaGate, Inc., the leader in next-generation solutions for service providers, announced today that it secured additional funding totaling \$8.9 million from Elron Electronics, Ltd., Clal Electronics Industries, and private U.S. investors. The capital infusion will be used to accelerate production, marketing, and sales activities as well as fund further research and development efforts for MediaGate's industry leading universal messaging and remote access technology platforms. "We're experiencing significant demand for our products and services, particularly in the areas of universal messaging and other remote access solutions," said Al Wokas, MediaGate CEO and president. "Providing ISPs and next-generation service providers with a carrier-class platform that is highly reliable and scalable, open and standards-based, and supports Internet-based applications represents a large revenue opportunity today. We're honored and pleased that Elron, Clal, and others have committed financial support to MediaGate. Their commitment is validation of our strategy and platform and allows us to move forward aggressively." "We raised a total of \$16.5 million in investments in the last two years," said Doron Herzlich, MediaGate's chairman. "The additional funding we've secured will enable MediaGate to meet the quickly growing marketplace demand for our products while also allowing us to meet the uncompromising expectations of our customers." "MediaGate has taken a unique approach to combining the data communications and telephony worlds," said Ken Landoline, industry analyst with Giga Information Group of Santa Clara, California. "MediaGate is offering a robust technology platform that supports multiple applications such as universal messaging, remote access services, and IP voice and fax. Instead of acquiring multiple single-functionality boxes, service providers can purchase the MediaGate platform and deliver a number of different services to their subscribers. This has the potential to enhance the total economic impact on service providers and allows for service differentiation and increased competitiveness in the marketplace." MediaGate's product line of unique universal communication solutions includes EdgeCommander(TM), the only RAS server in the industry that provides remote access functionality combined with modem, fax and telephony server capabilities on the same platform, utilizing sophisticated digital signal processing

39/3,AB/1 (Item 1 from file: 233)  
DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00534563 99PI05-018

Adding modems via USB; Inside Out Networks Rapidport/4 -- Ease the installation of new modems to your **remote-access server** with the Rapidport/4

Rigney, Steve

PC Magazine, May 4, 1999, v18 n9 p76, 1 Page(s)

ISSN: 0888-8507

Company Name: Inside Out Networks

URL: <http://www.ionetworks.com>

Product Name: Inside Out Networks Rapidport/4

Presents a favorable review of the Inside out Networks Rapidport/4 (\$1,399), a **multiple modem** adapter from Inside Out Networks Inc. of Austin, TX (512). Explains that the device houses four V.90 56Kbps modems and connects via USB port to a Microsoft Windows 95, 98, or NT 4.0 network. Calls it well-designed and convenient. Notes that it is easy to install on a USB-compliant network and requires no additional software. Adds that the modems behave as standard COM ports and as such, can be used with any Windows-based **communications** software, mail **server**, or bulletin-board system. Also includes support for multilink PPP for increased bandwidth. Reports no significant complaints; however, suggests that administrators may prefer installation on Windows NT to take advantage of its Remote Access Services (RAS). Concludes that this is a good modem solution for small and branch offices. Includes one photo.  
(kgh)

May 4, 1999

39/3,AB/2 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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02092729 SUPPLIER NUMBER: 19682566 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Industrial-strength connections. (enterprise-level remote-connection **servers** from Ascend **Communications**, Bay Networks and 3Com)

(includes a related article on how to read the suitability-to-task boxes)(Network Edition)(Hardware Review)(Evaluation)

Rigney, Steve

PC Magazine, v16, n15, pNE1(6)

Sep 9, 1997

DOCUMENT TYPE: Evaluation

ISSN: 0888-8507

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4095 LINE COUNT: 00319

ABSTRACT: Eight enterprise-level remote-connection servers are reviewed, including Ascend Communications' Max 4048, Bay Networks' 5399 Remote Access Concentrator and 3Com's AccessBuilder 5000 and Total Control Enterprise Network Hub. The servers cost from \$20,000 to \$90,000, but training and support costs must be added to this, and the products can be difficult to install, configure and maintain. Ascend's Max 4048 works as a **remote-access server**, **modem bank** and IP/IPX router, and in testing (two units costing \$26,400 each) its performance was above average, but it is not expandable. Bay Networks' \$19,995 5399 Remote Access Concentrator has two channelized T1/PRI interfaces and 48 digital modems on one hot-swappable card, while its price per port is the lowest of the eight, its Unix-based management and security functions are basic. 3Com's AccessBuilder 5000 cost \$95,515 in the test configuration and provides

great management tools and easy configuration, but it did not do well in the performance tests.

39/3,AB/3 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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01562610 SUPPLIER NUMBER: 15005068  
New **remote-access servers** ship. (Cray Communications  
Inc.'s Remote PC 'server; Shiva Corp.'s LanRover/E 2.0) (Product  
Announcement)  
Csenger, Michael  
CommunicationsWeek, n482, p5(1)  
Nov 29, 1993  
DOCUMENT TYPE: Product Announcement ISSN: 0746-8121 LANGUAGE:  
ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: Cray Communications Inc announces its Remote PC access server, which allows as many as 24 users to simultaneously dial into an Ethernet local area network (LAN). Remote users appear as local nodes on the LAN and have access to all networked resources. Users require software, which runs under MS-DOS, Microsoft's Windows or IBM's OS/2, and they need an asynchronous **connection** via a **modem**. **Modems** that operate at 28.8K-bps V-fast speeds are supported. With compression, throughput can be increased to 115.2K-bps or more. A Remote PC base unit costs \$2,595. Additional sets of six ports cost \$1,395. Shiva Corp introduces the LanRover/E 2.0 for both Novell Inc NetWare and Apple Remote Access. Both LanRover/E versions come in four- and eight-port models. They cost \$2,499 and \$3,499, respectively.

39/3,AB/4 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2004 CMP Media, LLC. All rts. reserv.

01212782 CMP ACCESSION NUMBER: IWK20000403S0079  
Digital Lines For Less  
INFORMATIONWEEK, 2000, n 780, PG160  
PUBLICATION DATE: 000403  
JOURNAL CODE: IWK LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: what'shot  
WORD COUNT: 141  
TEXT:

Multi-Tech Systems' hybrid ISDN/modem server card brings high-speed ISDN and V.90/56-Kbps remote access dial-up **communication** to open-**server** platforms without a T1 or Primary Rate Interface ISDN connection. The ~~PCI cards support the V.110 standard~~, which lets **remote-access servers** exchange data with users on GSM wireless data networks using standard GSM equipment. The new MultiModem ISI features two ISDN basic rate interfaces and four V.90 modems on a single card that plugs into any PCI-bus server. For optimal 56-Kbps modem data transfer rates, the V.90 modem on the server end must be digitally terminated. Until now, that meant subscribing to high-capacity ISDN PRI or T1 service. With the card, smaller companies can take advantage of true 56-Kbps **modem** speeds by **connecting** through less-expensive ISDN BRI lines. Price: \$1,499. Multi-Tech Systems: 800-328-9717;  
[www.multi-tech.com](http://www.multi-tech.com)

39/3,AB/5 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
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04199369 Supplier Number: 46140708

NT 4.0 gets warm reception

Computerworld, p16

Feb 12, 1996

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Tabloid; Trade

#### ABSTRACT:

Microsoft Corp.'s new version of its operating system Windows NT 4.0 will sport an additional feature called Remote Access Services (RAS) multilink, which will boost communications speeds. The RAS feature will enlarge the actual transmission bandwidth for a telephone connection. The multilink allows an NT server with multiple

communications ports and modems to use them like they were a single dial-up communications channel. The user would require a machine with two phone lines, two 28.8K bit/sec. modems and two communications ports. An RAS multilink would combine them into a single link of 57.6K bit/sec. by bundling the bandwidth of the two modems. The new Windows NT 4.0 will not be able to run on 386-based servers, or servers with 386SX chips. Also, initial versions of the 4.0 will not contain built-in support for faxes and a Microsoft Network client, although those features will be added later in 1996. The final introduction of NT 4.0 is expected for the second quarter of 1996.

39/3,AB/6 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
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03093260

Interphase Introduces Powerful New Server-based RAS Adapter Platform for Wide Area Network Connectivity

BUSINESS WIRE

October 13, 1998

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1247

DALLAS--(BUSINESS WIRE)--Oct. 13, 1998-- ENTIA(TM) Product Family Provides Industry's First Platform-based RAS Adapter Line Featuring High-performance CPU and Rockwell's Central-site Modem Technology Interphase Corporation (NASDAQ/NMS: INPH), an international supplier of network connectivity solutions, today introduced a comprehensive family of RAS (Remote Access Server) and WAN interface cards designed for enterprises deploying remote access and Internet access to remote users, including telecommuters, traveling employees and branch offices. The new ENTIA product line enables standard Intel-based servers running Microsoft Windows NT and other network operating systems to support remote access applications such as telecommuting, branch office connectivity, e-commerce, and virtual private networks. Server-based remote access communications is one of the fastest growing segments of the networking industry. Organizations worldwide are realizing the benefits of distributed computing while utilizing the market economics of open system PC servers. Some estimates show that over 75% of companies worldwide are currently deploying, or plan to deploy remote access solutions for their workforce. "In the new Internet-enabled business

environment, many enterprises are adopting or expanding their remote communications to remain competitive," said Stephen Polley, Interphase president and CEO. "Fueled largely by the acceptance of Microsoft NT, a major market opportunity is emerging for vendors that can deliver flexible and scalable remote access solutions. As an established leader in server WAN connectivity, Interphase is now raising the **RAS** market to a new level of functionality with the ENTIA platform." Addressing the Needs of Enterprise Remote Access Communications The ENTIA product platform offers a variety of interfaces allowing the IT manager to economically configure the network to the bandwidth requirements of the overall organization in support of application-specific requirements. In addition, the ENTIA's modular architecture is field-upgradable allowing more capacity or additional functionality to be quickly and cost effectively added if necessary. -- ISDN Connectivity - The growth in Internet access, LAN interconnectivity, multimedia, telecommuting and video conferencing applications has resulted in a dramatic increase in the need for remote access solutions utilizing ISDN. In addition, many enterprises are implementing redundancy via two methods: 1) using ISDN as a backup to an existing WAN infrastructure, and 2) establishing separate links with multiple ISP's to reach the Internet. Remote access usage of ISDN includes "Road Warrior" dial-in access, work-at-home, point-of-sale and branch office connectivity, e-commerce, Internet optimization and VPN (virtual private network) access. -- Leased Line (Serial) Connectivity - Serial connectivity allows the dedicated interconnection of data terminal equipment (DTE) in point-to-point or point-to-multipoint networking schemes using a variety of protocols such as PPP, Frame Relay, or X.25. Leased line services are utilized extensively in native SNA networking environments, SNA-to-LAN and LAN-to-LAN interconnections, and for building virtual private networks (VPNs). -- Digital Modem Connectivity - 56K modems represent an attractive alternative to ISDN for many enterprises because they can cost-effectively double line speeds of their existing 28.8 modem infrastructure. Also, many enterprises and ISPs (Internet Service Providers) are utilizing a combination of ISDN and 56K modem access to support their remote access clients. About the ENTIA Product Family The ENTIA product family is a comprehensive line of remote access and WAN adapters built on a core architecture utilizing an intelligent PowerPC processor to off-load communications protocol processing, thus enhancing overall server performance. An integrated MVIP (Multi-Vendor Integration Protocol) interface allows the ENTIA family to serve as a powerful and flexible platform for a wide variety of current and emerging computer telephony applications. The initial ENTIA family line includes the following adapters: -- ENTIA-BRI **RAS Adapter**: A single slot PCI adapter providing quad-port ISDN BRI (Basic Rate Interface) connectivity designed for the smaller office supporting WEB Servers, BackOffice, and Communications Server requiring connection to an ISP and remote users. The ENTIA-BRI is available in both S/T and integrated NT-1 (U-Loop) interface options, and comes standard with an NDISWAN Miniport driver for NT 4.0. ISDN signaling services are run on the on-board processor. -- ENTIA-PRI **RAS Adapter**: A single slot PCI adapter providing either single port ISDN PRI (Primary Rate Interface) connectivity for small to medium size businesses or dual port ISDN PRI for larger organizations and for Internet Premise Equipment (IPE) for use with ISP customer sites. Both T1 and E1 interface options are available. The T1 interface is available with a software-configurable integrated CSU option. The adapter comes equipped with an NDISWAN Miniport driver for NT 4.0 and provides ISDN signaling services via the on-board processor. -- ENTIA-T1/E1 WAN Adapter: A single slot PCI adapter providing either single or dual port T1/E1 connectivity for enterprise WAN applications. The T1 can be optionally configured with a built-in CSU unit for seamless interconnection to the wide area network. With a full NDIS driver, the IT manager can

access a variety of networking services including PPP (Internet), HDLC, X.25 and Frame Relay. -- ENTIA-SR WAN Adapter: A single slot PCI adapter offering a high-speed serial interface up to 2 Mbps. A full NDIS driver supports leased line connections over protocols such as HDLC, Frame Relay and X.25. In addition, Microsoft's SNA link applications are supported over SDLC, QLLC/X.25 and Frame Relay networks. -- ENTIA-DM30 RAS Adapter:

A single slot PCI adapter providing single or dual port PRI connectivity, and from 12 to 30 digital modems. The adapter uses Rockwell's AnyPort(TM) Central Site Modem Digital Signal Processing (DSP) technology which provides robust support for data intensive modulations including V.90 modem, emerging V.34 color fax, as well as Voice over IP (VoIP) capabilities. In addition, the card simultaneously supports both analog and ISDN call traffic, allowing the integration of data services, remote access and fax/voice over IP into a single platform for enterprise networks and ISPs. -- ENTIA-DM60 RAS Adapter: A single slot PCI adapter providing single or dual port PRI connectivity and twice the density of the ENTIA-DM30 RAS adapter with support from 24 up to 60 digital modems.

Availability and Pricing The ENTIA-PRI RAS Adapter and ENTIA-T1/E1 WAN Adapter are available immediately to OEMs directly from Interphase and to resellers and systems integrators from Gates/Arrow. Retail pricing for the ENTIA-PRI and ENTIA-T1/E1 begins at \$2,090.00. "We're excited to be offering the ENTIA product platform from Interphase to our reseller customers," said Gary Gammon, VP, Sales for Gates/Arrow. "A vast number of our resellers are implementing RAS products for their small and medium-sized business customers, and the need solutions that are quick to install, easy to manage and that offer significant profit potential. The ENTIA family allows us to offer them a flexible suite of RAS and WAN connectivity options upon which to build cost-effective product solutions."

About Interphase Corporation Interphase Corporation (NASDAQ/NMS: INPH) is a leading international supplier of reliable connectivity solutions for enterprise network applications requiring high-speed LAN, high capacity storage, remote access and WAN communications. The company's broad product line includes performance-proven I/O attachments for ATM, FDDI, Fast Ethernet, Fibre Channel, ISDN, and synchronous communications for mid-range to high-end servers and embedded architectures. Interphase products are designed for reliable performance in mission critical environments and are backed by ISO 9001 manufacturing excellence and comprehensive customer support programs. Additional information about Interphase and its products is available through the company's web site at <http://www.ipphase.com>.

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39/3,AB/7 (Item 2 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2004 The Dialog Corp. All rts. reserv.

02989318  
Equinox Begins Shipping 56K Modem Pool for NT RAS  
PR NEWSWIRE  
October 01, 1998  
JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 320

SUNRISE, Fla., Oct. 1 /PRNewswire/ -- Equinox Systems Inc. (Nasdaq:

QNX) announced that it began shipments of its new Digital Modem Pool on schedule. Introduced in August, the Equinox Modem Pool provides V.90 56Kbps modem connections over T1 telco lines for dial-in or dial-out access on any Windows NT 4.0 server. With the Digital Modem Pool, a Windows NT 4.0 server can support many dial-in users through standard communications software such as RAS, Dial-Up Networking, fax-servers and Hyperterm. Unlike board-level solutions, the Equinox Digital Modem Pool resides outside the server, and connects to an Equinox SuperSerial controller board in the server. This provides maximum performance, density and flexibility. Large scale remote access solutions may be configured with up to sixteen T1's (384 modems) supported per server. The Digital Modem Pool consists of a compact (1u) stand-alone chassis with an integral WAN interface capable of supporting a T1, E1 or ISDN PRI connection. Removing the chassis cover reveals five SIMM connectors, which accept Equinox Six-Modem Modules. The chassis and modem modules are sold separately, permitting modular expansion and support for fractional T1. EquiView Plus, a sophisticated SNMP-based software package, is provided free of charge with the Equinox Digital Modem Pool. It provides complete control, monitoring and diagnosis of calling activity and modem operation. List price for the Equinox Digital Modem Pool ranges from \$2,790 for a six-modem fractional T1 configuration to \$6,975 for a complete twenty-four modem unit. The software currently shipping with the product supports channelized DS1 formatted T1 lines, and will be followed by software upgrades which will add T1/PRI, E1/PRI and ISDN capabilities. Equinox, with headquarters in Sunrise, Florida, designs and markets server-based communications products for remote access, industrial and commercial point-of-sale systems. These products are available worldwide through leading distributors, systems integrators and VARs. Additional information about the product is available at [www.equinox.com/product/dmp.html](http://www.equinox.com/product/dmp.html) /CONTACT: Mary Dyer, Equinox Systems Inc., 954-746-9000 ext. 481, or e-mail, [news@equinox.com](mailto:news@equinox.com)/ 12:18 EDT

39/3,AB/8 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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09336765 SUPPLIER NUMBER: 19156303 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
The network extenders. (remote-access servers) (includes  
features directory) (Buyers Guide)  
Rash, Wayne Jr.  
InformationWeek, n619, pS5(4)  
Feb 24, 1997  
DOCUMENT TYPE: Buyers Guide ISSN: 8750-6874 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 1078 LINE COUNT: 00089

ABSTRACT: Remote-access servers are designed to help IT managers provide telecommuters with access to corporate networks without compromising network performance and security. Remote-access servers are as varied in size and shape as enterprise networks; most link multiple integrated modems to an Ethernet port and handle security and management via a built-in processor. There are three basic functions that self-contained remote-access servers have: communications, processing and networking. Unlike ISDN routers that link users to the Internet, remote-access servers handle multiple phone lines and offer management and security features. Most of the products listed in this buyer's guide come with either modem or serial ports. They all support Point-to-Point Protocol for serial communications.



39/3,AB/9 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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08773510 SUPPLIER NUMBER: 18432988 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Small offices get big-time communications. (IBM 8235 series of **remote access servers**) (First Look) (Hardware Review) (Evaluation)  
Aubrey, David; Rist, Oliver  
CommunicationsWeek, n616, p74(1)  
June 24, 1996  
DOCUMENT TYPE: Evaluation ISSN: 0746-8121 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 706 LINE COUNT: 00058

ABSTRACT: IBM's new 8325 Dials series of **remote-access servers** includes new models that extend the existing 8235 platform with low-cost devices aimed at small offices. The Ethernet 8325 052 and Token-Ring 8325 051 have two ports each instead of eight and can act as all-in-one **communications servers**. The 052 ships with IBM's Dials 4.0 server and client software, which remains somewhat difficult to install but supports many new features to make remote-office configuration easier. Virtual-connection and channel-aggregation support save time and money when using ISDN because line charges occur only during actual use. Tests show that performance is solid; V.34 **modem connections** work smoothly, and direct client/server connections are very fast. The 032 follows IBM's tradition of providing good security options, including password security, PPP authentication protocols and dial-back. It is also SNMP-manageable, as are other 8325 models.

39/3,AB/10 (Item 3 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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07835400 SUPPLIER NUMBER: 16235025 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Remote connectivity making you crazy? Consolidate! (managing remote-network connections) (includes related articles on leasing access servers, and on the cost of remote access)  
Durr, Michael  
Datamation, v40, n24, p51(4)  
Dec 15, 1994  
ISSN: 1062-8363 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 2045 LINE COUNT: 00163

ABSTRACT: Remote connectivity gets more complicated as more users log in, more protocols are supported, and more data travels between large-site LANs and outside workers. **Remote access servers** make it possible to consolidate the **communications servers, modem banks, gateways, and security schemes** involved in remote-access management. Electronic Book Technologies System administrator Lee Rich used 3Com's AccessBuilder to support AppleTalk, ~~TC~~ IPX/SPX, PPP, and other protocols used by the company to connect salespeople and remote offices. **Remote access servers** should support the LAN/WAN protocols and operating systems used by the company now and in the future; the aggregate throughput of the WAN connection card should accommodate all ports running at maximum speed, and server capacity should equal the number of lines. Other issues to consider when selecting a **remote access server** are security, client software, and router integration.

46/3,AB/1 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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02118921 SUPPLIER NUMBER: 19983024

Compaq, Cabletron add remote access to kit. (Compaq's Carbon Copy 5.0 remote control software, Cabletron Systems' MMAC-Plus modules) (Product Announcement)

Kujubu, Laura  
InfoWorld, v19, n45, p60(1)

Nov 10, 1997

DOCUMENT TYPE: Product Announcement  
English RECORD TYPE: Abstract

ISSN: 0199-6649

LANGUAGE:

ABSTRACT: Compaq announces the \$149.95 Compaq Carbon Copy 5.0 remote access software, while Cabletron Systems debuts switching modules for the MMAC-Plus chassis. Carbon Copy, formerly sold by Microcom, now supports Windows NT and Windows 95. It also offers Dynamic Internet Dial, which allows remote users to connect to a remote PC via the Internet. A simultaneous voice and data function allows users to talk at the same time they are connected to a PC, whether the connection be via the Internet, a network or a phone. Remote installation features allow users to install Carbon Copy over an NT network. Better security includes encryption and security integration with NT. The Cabletron modules supply Layer 2 and Layer 3 switching and support bandwidth-on-demand. Support for network layer **spoofing** makes it easy to move data rapidly between remote users and central sites. The modules work with **analog modems**, ISDN, frame relay, X.25 and leased lines.

46/3,AB/2 (Item 2 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
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02077720 SUPPLIER NUMBER: 19535755

Memotec speeds up frame relay access switch. (Memotec Communications' CX900e modular remote access switch) (Product Announcement)

Greene, Tim  
Network World, v14, n24, p26(1)

June 16, 1997

DOCUMENT TYPE: Product Announcement  
English RECORD TYPE: Abstract

ISSN: 0887-7661

LANGUAGE:

ABSTRACT: Memotec Communications' CX900e modular remote access switch provides users with flexible WAN connectivity from remote offices by acting as an **analog modem**, ISDN terminal adapter or frame relay access device. The CX900e supports local Synchronous Data Link Control **spoofing** to prevent SNA timeouts due to delays over the frame relay connection. It also supports voice over frame relay and four levels of prioritization. To conserve on the cost of wide-area links, the device consolidates traffic from a remote site onto a single frame relay Data Link Connection Identifier. Memotec plans to introduce two large frame relay devices by the end of 1997. Pricing for the CX900e ranges from \$1,995 to \$3,895, depending on its configuration.

46/3,AB/3 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
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09472477 SUPPLIER NUMBER: 19392580 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Remote access big at NetWorld. (Advanced Computer Communications' Tigris  
remote-access concentrator, Ascend Communications' Pipeline router,  
LeeMah DataCom SafeConnect and FasTraQ PC Card data/fax/modems and US  
Robotics NetServer 4.0 remote-access software at Networld+Interop, Las  
Vegas) (Product Announcement)

Radosevich, Lynda  
InfoWorld, v19, n18, p67(1)

May 5, 1997

DOCUMENT TYPE: Product Announcement ISSN: 0199-6649 LANGUAGE:

English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 385 , LINE COUNT: 00035

ABSTRACT: Vendors are preparing to launch several remote-access products at the NetWorld+Interop conference during the week of May 5, 1997. Advanced Computer Communications plans to announce its Tigris remote-access concentrator with prices, based on configuration, ranging from \$14,000 to \$152,000. Tigris promises to feature support for **analog modems** up to 56Kbps, **ISDN**, frame relay, leased lines and Switched Megabit Data Service X.25. Ascend Communications' contribution to the show consists of a Pipeline router product line addition aimed at the small and home office markets. Pipeline includes an external system adapter and is expected to be priced under \$500. LeeMah DataCom's SafeConnect and FasTraQ 33.6Kbps PC Card data/fax/modems will also debut at Networld+Interop. Both external models are priced at \$399 and the FasTraQ internal modem costs \$299. US Robotics promises to deliver its NetServer 4.0 software which features AppleTalk additions and supports **spoofing**, compression protocols and SNMP.

49/3,AB/1 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2004 CMP Media, LLC. All rts. reserv.

01023772 CMP ACCESSION NUMBER: NWC19940404S3529

Choose The Right Dial-Up Router For You (Routers)

Dave Molta and Jenny Gluck

NETWORK COMPUTING, 1994, n 504, 150

PUBLICATION DATE: 940404

JOURNAL CODE: NWC LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: Buyers Guide

TEXT:

Want to connect your remote sites together cheaply? Dial-up routers are the way to go. But selecting a dial-up router often involves a compromise among ease-of-use, functionality, performance and scalability features. Capable of providing low-speed internetworking at very appealing prices, dial-up routers are becoming increasingly attractive to businesses that need to offer full-functioning network connectivity to branch offices. These devices also hold significant appeal as tools for providing temporary network connections and as backup devices for higher-speed links, particularly wireless links that may be affected by adverse weather conditions. Although most popular products provide a core set of basic features, matching your requirements to the available alternatives can be challenging. This Buyer's Guide provides an overview of the more significant questions to ask vendors, along with recommendations of how to weigh features when making your final selection. Their communications throughput makes these products inappropriate for many LAN-oriented applications for example, traditional LAN databases and launching of applications from a remote server that assume multimegabit transmission speeds. In this sense, when a vendor tells you dial-on-demand provides the full functionality of a high-end router, it is referring to the technical capabilities to support certain protocol suites. While this is important, unless you have sufficient bandwidth to support your applications, you aren't much better off than you would be without connectivity. Nonetheless, these products do an excellent job of supporting a wide range of client/server applications at an affordable price. Unlike leased-line router connections, which have a fixed monthly cost, the savings you realize from dial-up often depends on the amount of time per day that you are not connected. In general, the crossover point at which a leased line setup becomes attractive economically compared to a dial-up system is when access time exceeds three to five hours per day. There are multiple options in today's dial-up router market for interconnectivity speeds and technologies, including synchronous and asynchronous, traditional analog, Switched 56 and Integrated Services Digital Networks (ISDN). There are many questions to ask before you make a purchasing decision. What specific protocol suites do I need to support? Will the company and/or site grow enough to require additional lines with load-balancing algorithms (inverse multiplexing)? Will it be cheaper, or possible, for the dial-up router to be reconfigured to support a traditional T1 connection, if flexible bandwidth and multiple lines are desirable, can the router monitor traffic levels dynamically and open or close additional connections? Are specific features limited to a selected protocol, such as Internet Protocol (IP)? All About Protocols The most common protocols supported by dial-up routers are TCP/IP, IPX and AppleTalk. For sites that need IP access only or are willing to tunnel other protocols inside IP, a number of alternative, link-level protocols are available, including the Point-to-Point protocol (PPP), the Serial Line Internet Protocol (SLIP) and the Compressed Serial Line Internet Protocol (CSLIP). For sites requiring specific support for multiple

protocol suites, including IP, IPX and AppleTalk, PPP is chosen most often. PPP's advantages include a method for encapsulating datagrams using high-level link control over asynchronous or synchronous serial links and a comprehensive Link Control Protocol (LCP) used to establish, configure and test the data-link connection protocols and to define the different network-layer protocols. Support for PPP also facilitates interoperability among vendor products but, given the immaturity of IPX implementations over IPX, do not assume this will be the case. You may be disappointed to learn that the routing protocols available in dial-up routers are more limited than those found in high-end routers. The most common routing protocol for IP is the Routing Information Protocol (RIP). Novell uses a combination of its own RIP and the Service Advertising Protocol (SAP). AppleTalk Phase 2 uses the Routing Table Maintenance Protocol (RTMP), the Zone Information Protocol (ZIP) and the Name Binding Protocol (NBP). Unlike traditional routers, which are always available to receive and propagate routing information, dial-up routers include software that either -spoofs- the remote router or establishes proxy networks in which an algorithm is designed to buffer the routers from the changes in the routing tables. **Spoofing** is used between local and remote networks. When a modem disconnects from a NetWare server, users usually are logged off after a fixed period of inactivity. **Spoofing** software convinces the NetWare server that the connection should be maintained. There are two schools of thought concerning the methodology used by a dial-up router to master its routing information. One suggests that static information is best, particularly when there is limited buffer space allocated. Extreme caution must be exercised with static routes, because an error in the addition of a route could harm the whole network. The other suggests using the routing protocol generally used by the backbone routers. Initially, the default route to the remote route should be hardcoded into a remote machine, directing the router to its routing information. The dial-up router must be updated with changes in the routing table. There must be a method, such as proxy networks, to discern valuable information to minimize operating costs. Configuration of an IPX router can be as simple as setting the local IPX network number and letting the router do the rest, or as complex as assigning an internal network number and IPX address. Most dial-up routers support the full AppleTalk protocol implementation, while others support the AppleTalk Remote Access Protocol (ARA), which allows for dial-up AppleTalk connections from any ARA client. Some vendors sell hardware and software at predetermined prices, while others add costs to the dial-up router based on the selection of network protocols. Vendors may sell each protocol separately or in a package. All these protocol options carry a support burden. Many sites particularly those requiring multiple protocols consider media-access layer bridges as alternatives. But bridges have more limited packet-filtering capabilities and pass broadcast and multicast packets across the LAN. This can be troublesome over low-bandwidth links using chatty protocols, such as IPX and AppleTalk, since a significant portion of the limited bandwidth is not available for the transmission of meaningful data. **Modems and Connection** Some routers come with internal modems, while others provide a serial interface that must be attached to an external modem. In general, routers with internal modems are easier to configure. However, as standards emerge for higher-speed, dial-up modems, it makes sense to ask vendors about upgrades. Many products allow for multiple WAN interfaces for example, two or more dial-up circuits that can be pressed into service automatically if traffic warrants. If the need for faster speeds is anticipated and if these services will be available locally, it's wise to ask about products that support ISDN Basic Rate Interface (BRI) and Switched 56.P Data compression facilities are very important, particularly for applications in which large numbers of text files, such as e-mail messages, will be carried across the link. In addition to the compression

found in CSLIP or PPP, compression can be implemented in either the modem usually V.42bis or MNP v5 and/or the proprietary router hardware. When planning for future growth or additional bandwidth needs, ask your vendor whether the serial connection can handle speeds up to 115.2 Kbps. This should allow ample room for growth as new modem technologies, such as V.FAST, are introduced. Most vendors will handle maximum speeds of 57.6Kbps, which may prove limiting long-term. In addition to compression, some dial-up router vendors attempt to reduce phone line access with filtering schemes and usage quotas. Furthermore, although not an inherent component of the router itself, many vendors recommend the use of planned delivery schedules for applications, such as e-mail, where outgoing and incoming mail is queued for periodic delivery. Whether or not batch-oriented mail delivery is feasible may be the deciding factor when you consider dial-up or leased-line routers. Filtering can be used to minimize connect time by restricting access to certain hosts, networks or protocol ports. If quotas are available on a router, they can be set to hang up a session after the predetermined connect time limit is reached. This feature may be an effective vehicle for reducing costs. Logging also is useful for reducing connect time, since it helps to identify users whose applications require significant connect time. Security and Setup Many sites will be concerned about security, since these products use industry-standard modems and link protocols. Most products incorporate multiple security mechanisms ranging from password-based authentication to dial-back security. Protocol filtering capabilities also may be used to thwart unauthorized use. Finally, before choosing a product, consider configuration and management issues to ensure a smooth setup and successful, long-term integration within the network. Dave Molta is director of network systems at Syracuse University. His Internet ID is djmolta@mh.syr.edu. Jenny Gluck is a network systems programmer at Syracuse University. She can be reached at jsgluck@mailbox.syr.edu.

49/3,AB/2 (Item 1 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
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2008096 Supplier Number: 02008096  
VPN service out by AT&T WorldNet  
(AT&T WorldNet made its second pitch to corporate customers by releasing its first virtual-private-network service and service guarantees)  
Computer Reseller News, p 109  
December 01, 1997  
DOCUMENT TYPE: Journal ISSN: 0893-8377 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 546

ABSTRACT:

AT&T WorldNet made its second pitch to corporate customers in as many months by releasing its first virtual-private-network (VPN) service and service guarantees. It is unlikely, however, that all VARs will get a chance to sell them. The carrier will sell the service using its own sales forces and also through Hewlett-Packard Co. and Novell Inc VARs. It is unlikely the services will be sold through smaller VARs, said Ray Tringali, channel management vice president for network commerce services at AT&T. VPNs give companies a way to connect users and sites using IP networks, instead of hooking up private circuits or Frame Relay services. Until now, customers have been building their own VPNs and remote-access platforms using carrier services as piece parts. AT&T's VPN service guarantee becomes available when the service itself becomes widely available in 1998, company officials said. If a VPN access connection is down for 10 minutes or more

during any single day, AT&T will credit the customer for 5% of their monthly connection charge up to a maximum of 25% in one month. The annual maximum credit is one month of service, officials said. AT&T's VPN service also features dial-in access from more than 300 points of presence or using toll-free services. AT&T also announced its support for 56-Kbps modem access in several cities. It will support ISDN dial-up access by April 1998. AT&T is offering several security features, including support for Remote Authentication Dial-In User Service (RADIUS) servers, which use Novell Directory Services to authenticate users dialing into the network. The carrier also said it uses packet filters at the edges of its IP backbone to help prevent address spoofing from all customer network access points. In the first VPN iteration, AT&T will offer VPNs for closed-user groups, or addresses that are spoof-proof on the Internet or anywhere. Later next year, AT&T will add network-based TCP tunneling, and follow up with standard tunneling support in late 1998. Dedicated and remote-access services and router management are available now. A managed firewall service are expected in early 1998.

49/3,AB/3 (Item 1 from file: 583)  
DIALOG(R)File 583:Gale Group Globalbase(TM)  
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06608714

EASIER REMOTE ACCESS

SINGAPORE: TWO NEW ROUTERS FROM ASKEY

Asia Computer Weekly (XCF) 29 Mar 1998 ACW ShowPreview, P.4

Language: ENGLISH

Two new routers will be launched by Taiwan-based Askey Computer Corp at the Networld+Interop 98 show to be held in Singapore. The two routers are the MagicXpress Remote Access ISDN Router and the MagicXpress Super Modem Router. The RAR 1900 Series ISDN Router automatically allocates network parameters to any LAN device. The router can establish an ISDN connection to the Internet, based on the required ISDN number and user account data. It offers LAN dial-in access and dial-out services to a small office. The MXRT4000 Series Super Modem Router is a 4-port modem router that has 4 concurrent modem connections. The router offers IP/IPX routing, IP/IPX spoofing, PPP and Multilink PPP, bridging support. Its IP level load sharing features expands data throughput during Internet access using multiple modem connections.

21/3, AB/1 (Item 1 from file: 2)  
DIALOG(R) File 2:INSPEC  
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6653251

Title: **RAS** platforms transition [telephony/CTI]

Author(s): Gatens, D.

Journal: Communications News vol.37, no.6 p.60-2

Publisher: Nelson Publishing,

Publication Date: June 2000 Country of Publication: USA

CODEN: CMUNA9 ISSN: 0010-3632

SICI: 0010-3632(200006)37:6L:60:PTT;1-M

Material Identity Number: F947-2000-007

Language: English

Abstract: Next-generation **remote access server** (**RAS**) platforms will evolve from **modem** termination devices to platforms that will support voice, fax, and data traffic, providing both access to broadband wide area networks and the **public switched telephone network (PSTN)**. This emerging multiservice concept, universal port, leverages voice, fax, and **modem** over Internet protocol (IP) technologies, allows a single platform to terminate all types of calls supporting the convergence of voice and data services.

Subfile: D

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21/3, AB/2 (Item 2 from file: 2)  
DIALOG(R) File 2:INSPEC  
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5755709 INSPEC Abstract Number: B9801-6210L-003, C9801-7100-002

Title: Real options for today's nomads and telecommuters

Author(s): Gavurin, S.; Shapland, E.G.

Journal: Business Communications Review vol.27, no.10 p.41-5

Publisher: BCR Enterprises,

Publication Date: Oct. 1997 Country of Publication: USA

CODEN: BCORBD ISSN: 0162-3885

SICI: 0162-3885(199710)27:10L:41:ROTN;1-A

Material Identity Number: F939-97011

U.S. Copyright Clearance Center Code: 0162-3885/97/\$0.00+.50

Language: English

Abstract: In the past, remote access applications were generally limited to electronic mail, file transfers and legacy terminal-to-host style communications. From a networking standpoint, there were only two remote access solutions: **modem** dialling through the **public switched telephone network (PSTN)** or frame relay services. Since then, we have seen Web browsers simplify and expand the utility of both client-server applications and Internet remote access solutions. Networking choices are multiplying with higher speed **modems**, enterprise-strength **remote-access servers**

and increased availability of ISDN in many areas. Cable **modems** and ADSL (Asymmetric Digital Subscriber Line) are also beginning to roll out. No single choice, or single combination of choices, will be right for the needs of most remote users, however. This is not just because the new options are not widely deployed but also because remote requirements vary so widely by organization and by individual. There is, however, a general distinction between employees whose work temporarily takes them away from their normal office site (nomads), and those who regularly work in single-person remote offices (telecommuters). Making practical choices for these two classes of remote access starts with profiling their requirements



04460425

E.I. No: EIP96083261228

Title: **Remote access servers**: no mess, no stress

Author: Taylor, Kieran

Corporate Source: Data Communications

Source: Data Communications v 25 n 9 Jul 1996. 6pp

Publication Year: 1996

CODEN: DACODM ISSN: 0363-6399

Language: English

Abstract: The new cornerstone in the enterprise network appears to be the integrated **remote access server**, with about a dozen vendors now offering such products. They are modular and scalable and can be used as the basis of a corporation's remote access approach. A single unit terminates multiple high-speed WAN connections, features one of more direct LAN interfaces, and integrates dial-in and dial-out **analog modem** and ISDM Terminal adapter functions. Thanks to **ISDN PRI** features, a single WAN connection can be used for both analog and digital dial-in users, a step that leads to some big savings. Cabling hassles are cut, and management becomes much simpler. However, offering vary widely in capacity, price, and functionality.

30/3,AB/5 (Item 2 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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04351618

E.I. No: EIP96023044713

Title: Bandwidth on demand with **ISDN** chips

Author: Anon

Source: Siemens Components v 30 n 6 Nov-Dec 1995. p 6-7

Publication Year: 1995

CODEN: SICOD5 ISSN: 9173-1734

Language: English

Abstract: Ascend Communications markets three classes of switched digital access products: Multiband, Pipeline, and MAX. Multiband is a multiplication network access equipment that uses inverse multiplexing. Pipeline offers inexpensive dial-up digital circuits, readily available **modem-based analog** circuits, and conventional digital leased lines as well as basic rate **ISDN**. MAX bandwidth-on-demand servers, for up to 96 remote users, integrate voice, data, and video traffic to maximize network capabilities while driving costs down. Furthermore, **ISDN** chips from Siemens perform essential functions in all three Ascend product families. In particular, the high-level serial communications controller extended and the **ISDN** subscriber access controller from the Semiconductor Group are core components of Ascend servers.

30/3,AB/6 (Item 1 from file: 99)

DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs

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1698476 H.W. WILSON RECORD NUMBER: BAST98010245

Remote access supports analog/digital mix

Levkoff, Keith;

Byte v. 23 (Jan. '98) p. 26-7

DOCUMENT TYPE: Product Evaluation ISSN: 0360-5280

ABSTRACT: The latest generation of **remote-access servers** offers support for a

AB/1 (Item 1 from file: 2)

LOG(R)File 2:INSPEC

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5369903 INSPEC Abstract Number: C9610-5630-007

Title: 5 reliable servers for remote access

Author(s): Kane, J.; Hudson, D.; McDonough, J.; Bender, M.; Colwell, S.

Journal: BYTE vol.21, no.7 p.102-8

Publisher: McGraw-Hill,

Publication Date: July 1996 Country of Publication: USA

CODEN: BYTEDJ ISSN: 0360-5280

SICI: 0360-5280(199607)21:7L:102:RSRA;1-4

Material Identity Number: B183-96006

Language: English

Abstract: This paper reviews five reliable **remote access servers**. They are: 3Com's AccessBuilder 4000, Digi International's AccelePort 8em, Emulex's ConnectPlus Pro, SBE's netXpand Central, and Shiva's LanRover/E. They all offer different architectures and price/performance levels. The routers use serial-port **connections** for external **modems** or have Type II or Type III slots for PC Card **modems**. The servers all come with remote access management software, and they have such security features as encrypted password protection, the password authentication protocol (PAP), and the challenge handshake authentication protocol (CHAP). The major reason there are so many checks and challenges is security.

Subfile: C

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39/3,AB/2 (Item 1 from file: 99)

DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs

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1183118 H.W. WILSON RECORD NUMBER: BAST94051746

Tuning remote nodes in 10 easy steps

Durr, Michael;

Datamation v. 40 (Sept. 1 '94) p. 51-2

DOCUMENT TYPE: Feature Article ISSN: 0011-6963

ABSTRACT: When connecting remote nodes to a local area network (LAN) via a dial-up connection, performance is determined not by the fastest hardware or software component involved but by the slowest component. Although the most obvious bottleneck in remote connection is the speed of the dial-in link, remote-access systems provider Shiva found that the overall performance of the system can be affected by the PC hardware, PC serial port, application software, remote-access client software, **modems connected** to the remote PC and the server, phone connection, **remote-access server hardware, remote-access server software**, the network operating system, and LAN efficiency. Shiva's recommendations for avoiding potential bottlenecks in these areas are presented.

39/3,AB/3 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015700686

WPI Acc No: 2003-762879/200372

Statistical processing system in private branch exchange and method

anets, Internet telephony, enterprise network directory services, Web  
management tools, Internet protocol switching, wavelength division  
multiplexing, digital subscriber lines, and the plain old telephone service  
(POTS) modems.

45/3,AB/8 (Item 4 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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04804342

E.I. No: EIP97093801995

Title: 56K? No way

Author: Shah, Deval; Holzbaaur, Helen

Corporate Source: Data Communications

Source: Data Communications v 26 n 10 Aug 1997. 8p

Publication Year: 1997

CODEN: DACODM ISSN: 0363-6399

Language: English

Abstract: There's nothing mysterious about the drawing power of 56 kbit/s modems but there is a need for speed to be able to let users move data faster than V.34 plus devices. This is possible except that these modems do not hit the legal limit. The highest raw data rate with any modem is 43.2 kbit/s or about 30% short of true 56 kbit/s throughput. These modems does not yield 4:1 data compression ratio because the highest effective data rate is only close to 100 kbit/s mark yielding to a compression ratio of less than 2:1. These modems are also much more sensitive to noise than older devices. This sensitivity to noise will make it difficult for these modems to reach the 56 kbit/s throughput.

45/3,AB/9 (Item 5 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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04632799

E.I. No: EIP97023537591

Title: RAS race: Picking a winner

Author: Cholewka, Kathleen

Corporate Source: Data Communications

Source: Data Communications v 26 n 2 Feb 1997. 8p

Publication Year: 1997

CODEN: DACODM ISSN: 0363-6399

Language: English

Abstract: Remote area servers (RAS) are now being widely used in wide area network (WAN) because more remote users need to access to central-site resources finding RAS connections faster and reliable. Although RAS is in the hot market, prospective buyers should sort through the RAS pack carefully. Wide area network capacity (WAN) as well as low area network capacity (LAN) must be considered. Modem speeds, grade path, and type must be also checked. Internal architecture, security, data compression, fault tolerance, management capabilities and price, should also be looked into.

45/3,AB/10 (Item 1 from file: 34)  
DIALOG(R)File 34: SciSearch(R) Cited Ref Sci  
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12479626 Genuine Article#: 771VP Number of References: 21